Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference H 4097/4648 PCT	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/EP00/09011	International filing date (*day/month/year*) 15 September 2000 (15.09.00)	Priority date (*day/month/year*) 24 September 1999 (24.09.99)
International Patent Classification (IPC) or national classification and IPC C08G 18/40		
Applicant HENKEL KOMMANDITGESELLSCHAFT AUF AKTIEN		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
22 February 2001 (22.02.01)	02 January 2002 (02.01.2002)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP00/09011

I. Basis of the report

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

☐ the international application as originally filed.

☒ the description, pages 1-13, as originally filed,
pages _____, filed with the demand,
pages _____, filed with the letter of _____,
pages _____, filed with the letter of _____.

☒ the claims, Nos. 1-11, as originally filed,
Nos. _____, as amended under Article 19,
Nos. _____, filed with the demand,
Nos. _____, filed with the letter of _____,
Nos. _____, filed with the letter of _____.

☐ the drawings, sheets/fig _____, as originally filed,
sheets/fig _____, filed with the demand,
sheets/fig _____, filed with the letter of _____,
sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/fig _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	6-11	YES
	Claims	1-5	NO
Inventive step (IS)	Claims		YES
	Claims	6-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

2. Citations and explanations

Novelty: US-A-4 668 360 (D1) describes water-dispersible coatings for electrophoretically deposited immersion paints, said coatings containing (a) an acryl polymer with OH and NH_4^+ functionalities and (b) a blocked polyisocyanate. The latter may also be a prepolymer obtained by reacting a partially blocked polyisocyanate with an active hydrogen-containing compound (column 5, lines 61-66). The blocking agent is, *inter alia*, a lactam, phenol or oxim (column 6, lines 6-54). Representatives of the cycloaliphatic compounds are mentioned as blocked polyisocyanates in Example 1 (H_{12}-MDI). Consequently, Claims 1-5 of the present application lack novelty over D1.

This type of aqueous coating compositions based on a polymer containing an active hydrogen functionality and blocked, aliphatic or cycloaliphatic polyisocyanate prepolymers ("paint polyisocyanates") is also known from US-A-5 034 435 (D2), EP-A-0 303 182 (D3) and DE-A-28 14 815 (D4). Consequently, D2-D4 are also detrimental to the novelty of Claims 1-5 of the present application (PCT Article 33(2)).

Inventive step: The problem addressed by the present

application is that of providing a coating system for stainless steel surfaces which satisfies particular requirements with regard to resistance against various agents, is dirt-repelling and scratch-resistant. Polyurethane coatings of this type made of acryl polyols, epoxide resins or fluoro-resins and blocked polyisocyanates are known, for example, from JP-11 061 039 (cited in the search report as a Derwent Abstract AN-1999-232915 (D5)). These coatings are also applied to stainless steel plates of household appliances, for example, and are characterised by their weather-, dirt- and chemical-resistance. If that document is regarded as the closest prior art, the difference from the present application is that the coating is not applied in an aqueous solution.

The advantages of the use of aqueous systems are sufficiently known from the prior art and extensively described (see D1-D4), and are therefore obvious to a person skilled in the art. It is not clear from the application what technical problem is solved by the distinguishing feature in comparison with the closest prior art in D5. It is noted that the coatings in D5 are hardened in the same conditions as in the application (see Claim 7, last method step). Consequently, no inventive step can be recognised in the use and method Claims 6-11 (PCT Article 33(3)).

There are no objections to **industrial applicability.**